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ABSTRACT

The Curriculum Inquiry Cycle is a professional development process that supports educators as they match curriculum and instruction to state standards, local needs, and student characteristics. Ways in which to implement this cycle are provided in this booklet. There are four phases in the cycle: examining current practice, making decisions, creating optimal learning environments, and researching the classroom. The goal of the curriculum inquiry cycle is to create a self-sustaining process, applicable to all areas of the curriculum, for improving learning and teaching. Teams composed of teachers and administrators from a school or district can engage in the curriculum inquiry cycle in a variety of ways, onsite or offsite. It begins with teachers' personal knowledge and experience by asking teachers key questions for making decisions, such as what guides their decisions about priorities for student learning and how they articulate their beliefs about curriculum. Curriculum inquiry cycle engages the teachers in various activities that call for teachers to connect ideas about curriculum to beliefs about learning and teaching, so that they can map standards to curriculum, learn about students from demographics, discover activities and evidence of student learning, and visualize the learning context. An appendix provides a variety of participant handouts. Contains 13 references. (RJM)

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Making Decisions

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The Curriculum Inquiry Cycle:

Improving Learning and Teaching

Making Decisions

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Overview of the Curriculum Inquiry Cycle

What is it?

The Curriculum Inquiry Cycle is a professional development process that supports educators as they make curriculum and instruction decisions responsive to state standards, local needs, and student characteristics. Its focus is the classroom. There are four phases in the cycle: Examining Current Practice, Making Decisions, Creating Optimal Learning Environments, and Researching Our Classrooms.

The goal of the Curriculum Inquiry Cycle is to create a self-sustaining process, applicable to all areas of the curriculum, for improving learning and teaching.

How does it work?

Teams composed of teachers and administrators from a school or district engage in the Curriculum Inquiry Cycle either onsite during the school year, in a five-day summer institute hosted by the Northwest Regional Educational Laboratory (NWREL), or in a combination of summer institute and onsite follow-up. Individual needs and interests will vary: Teams who wish to experience the full cycle may find the summer institute and follow-ups most beneficial; other teams may wish to use selected phases of the model onsite, to support curriculum renewal work already under way.

What will be gained from the process?

Participants will:

- Learn a team approach to curriculum inquiry that supports curriculum planning and instructional design
- Plan strategies to involve other staff (and, as desired, students, parents, and community members) in the process
- Analyze current curriculum and instruction in light of 1) teacher beliefs about learning; 2) models of curriculum; and 3) national, state, and local standards (*Examining Current Practice*)
- Develop shared understandings and set priorities for effective, engaging curriculum and instruction in a content area (*Making Decisions*)
- Determine critical learning experiences to ensure student achievement of agreed-upon goals (*Creating Optimal Learning Experiences*)
- Decide teaching/learning questions to study in classroom settings and design a process for sharing findings (*Researching Our Classrooms*)
- Develop guidelines for local curriculum documents, decisionmaking processes and classroom practices.

Where can interested parties get more information?

NWREL Curriculum and Instruction Services staff, Dr. Jane Braunger and Dr. Maureen Sherry Carr, can answer questions about the Curriculum Inquiry Cycle and help plan onsite use of the model appropriate to school and district needs. They can be reached at NWREL, 101 SW Main, Suite 500, Portland, OR 97204, fax (503) 275-9545. Dr. Braunger can be reached by phone at (503) 275-9588 or by e-mail at braungej@nwrel.org. Dr. Carr can be reached by phone at (503) 275-0441 or by e-mail at carrm@nwrel.org. Information on the Curriculum Inquiry Cycle is also available on NWREL's Web site (http://www.nwrel.org/scpd/ci/index.html).

Making Decisions

Challenging academic standards have significant support among policymakers, educators, the business sector, and parents (Ravitch, 1992). It makes sense to most people that if we set expectations and require students to meet them and teachers to teach to them, academic excellence will become the norm. However, a set of standards, no matter how finely crafted, will not create the conditions for learning required to actively engage learners in a meaningful educational enterprise. Only teachers can make the classroom decisions necessary to restructure curriculum, instruction, and assessment in a way that will lead to greater student learning.

The Curriculum Inquiry Cycle begins with teachers' personal knowledge and experience of learning and teaching. In the first phase, Examining Current Practice, teachers explore their personal theories of learning and teaching and connect these not only to what occurs daily in the classroom but also to formal theories of learning and teaching that have been derived from behavioral and cognitive science, research on the brain, and multiple conceptions of intelligence. In phase two, Making Decisions, teachers connect their beliefs about learning to their views of curriculum; examine practice more deeply in light of local, state, and national standards; identify matches and gaps between the goals and expectations for students and student achievement; create a shared vision for student learning in their school/district; and set priorities that will lead to the realization of their vision of student learning.

Key Questions For Making Decisions

What is my understanding of curriculum? Are content, performance, and opportunity-to-learn standards reflected in my teaching practice? What is the fit between my learning goals for students and the expectations articulated in state and local standards and assessments? What guides my decisions about priorities for student learning?

Outcomes:

- Articulation of teachers' beliefs about curriculum (curriculum as fact, activity, inquiry, etc.)
- Knowledge of other views of curriculum (curriculum theorists, teachers, researchers, community members, parents, textbook publishers)
- Understanding of content and performance standards in the state
- Indepth analysis of the fit between current teaching goals and content standards
- Comparison of current expectations for students and performance standards
- Translation of standards into classroom practice
- Agreement on priorities for student learning to ensure student attainment of standards
- Identification of need areas (teacher knowledge, materials, planning) to achieve priority goals

To fully explore the connections among standards, curriculum, and student learning, two (six-hour) meetings are recommended. This time frame allows an indepth examination of the connection between curriculum content and content standards, the relationship between student work and standards, and the fit between expectations for students and authentic student learning. The two-day format can be completed in two successive days if preparation activities have occurred prior to the meetings. However, a period of two to three weeks between meetings allows teachers to reflect on the ideas discussed on the first day and to collect and organize information needed in the second session.

Standards, Curriculum, and Student Learning

Standards-based curriculum reform is a strategy to improve student academic achievement by setting rigorous expectations for performance in academic subjects (McLaughlin & Shepard, 1995). Proponents maintain that setting clear, challenging academic expectations will motivate students to expend the effort required for high levels of achievement. The application of the standards to all students is an essential aspect of standards-based curriculum reform. Standards are seen as a way to provide direction for teachers in terms of the curriculum designed for students and the types of instructional practice needed to improve student achievement (Gandal, 1996).

What are standards?

Standards are stated expectations for student academic achievement. They identify what students should know and be able to do as a result of their K-12 schooling. The National Education Goals Panel, created through Goals 2000, described two interdependent standards: content standards and performance standards. *Content standards identify what the student is expected to know after participating in a particular course of study.* Performance standards indicate how well the student has learned the material. *Performance standards indicate the nature of the evidence* (e.g., setting up an experiment to demonstrate ability to use scientific method) *and the level of performance considered satisfactory* (e.g., basic, proficient, expert) (Anderson et al., 1996).

Some critics of standards-based curriculum maintain that inequalities in physical and instructional resources in the nation's schools will interfere with many students' ability to meet challenging standards. This concern prompted a discussion of school delivery standards, later called opportunity-to-learn standards (OTL), which describe resources and conditions that should be available so that all children have an equal chance of performing at required levels. Conditions that fall in this category of standards include

knowedgeable teachers, effective learning activities, quality instructional materials, and a psychologically and physically safe school environment (McLaughlin & Shepard, 1995).

What is the difference between benchmarks and standards?

- Benchmarks may be thought of as elements of the content standards. Generally, they are more specific statements of what students are to accomplish by a certain time period. *Benchmarks identify specific learning behaviors that allow teachers to set goals and engage students in activities that assist students to meet standards.* Benchmarks may be organized by grade level (grade one), grade clusters (grades six through eight), age ranges, or school levels (intermediate).

The following examples from the state of Washington standards illustrate the relationship between the content standards and benchmarks:

- Content Standard for Reading Comprehension: Understand the meaning of what is read (global statement).
- Grade Seven Benchmark: readily identify and comprehend the main idea and supporting facts and details; summarize ideas in own words (more specific behavior).

Who has developed content standards?

The National Education Goals Report: Building a Nation of Learners specifically identified academic achievement in two of the national goals. These goals stated that American students would demonstrate mastery in challenging subject matter and that, by the year 2000, students in the United States would excel in mathematics and science. In 1994, the improvement of student achievement through high standards for all students became national policy when the Goals 2000: Educate America Act and the Improve America's Schools Act were signed into law (Diegmueller, 1995).

Goals 2000 sparked discussion about curriculum, assessment, and the possibility of national standards that would focus educational reform. The National Council of the Teachers of Mathematics (NCTM) was a leader in this effort, and this organization's curriculum and evaluation standards revealed the potential of national standards for comprehensive reform. More than 40 states used NCTM standards to revamp mathematics curricula (Ravitch, 1992). Professional groups that have also developed standards include the American Association for the Advancement of Science (Project 2061), National Science Teachers Association (Scope, Sequence, and Coordination of National Science Education Standards), the International Reading Association (IRA), and the National Council of the Teachers of English (NCTE). The National Center for History in the Schools published three sets of standards for K-4, United States history, and world history (Diegmueller, 1995).

Since the Goals 2000 education summit in 1989, most states have designed content and performance standards as part of school improvement efforts. By 1991, 31 states had identified content standards, and by April 1995 every state except Iowa had set standards at the state level (Mid-continent Regional Educational Laboratory [McREL], 1996).

Are standards and curriculum synonymous?

Standards are outcome statements. They are the educational destination, and curriculum is the journey students and teachers make to reach that destination. A primary responsibility of teachers in a standards-based system is to map instructional practice onto a group of content and performance standards so that classroom experiences have a clear focus for students. Educators must make decisions about which standards to emphasize and which content and processes are crucial to help students reach the standards. Teachers must decide what kinds of learning activities move students toward meeting standards and which assessments truly let students demonstrate the depth and breadth of their learning.

What difference does a standards-based system make for students?

The measure of student success will no longer be through credits earned and time served. All students will have to meet the high expectations set by the standards. Of course, *students may reach the standards in a variety of ways, and teachers will need to vary learning conditions to allow for individual differences.* This is a departure from past practice, which was to vary expectations and keep the conditions of learning about the same for all students (Schalock, Tell, & Smith, 1997). Students will be asked to show learning through multiple formats: criterion-referenced tests, demonstrations, exhibitions, and so forth.

Overview Of Activities For Making Decisions

Activity One—Connecting Ideas About Curriculum to Beliefs About Learning and Teaching

Purpose:

Beliefs about learning, teaching, and curriculum are connected. They all reflect ideas about what knowledge is most critical for students to learn and the most effective way for students to learn it (Prawat, 1992).

This activity engages team members in an exploration of their notions of curriculum through a combined brainstorming and mapping process. Participants then connect the curriculum statements derived from this process to the beliefs about learning and teaching articulated in phase one, Examining Current Practice.

"Curriculum is the heart, the pulse of the school; it is what drives everything else" (Costa & Leibman, 1997).

Procedure:

- Team members free write ideas about curriculum for five minutes.
- Team members share their concepts of curriculum with the whole group, and these ideas are recorded through a mapping process.
- Team members review their belief statements developed in Examining Current Practice to check the connections between their ideas about curriculum and their ideas about how students learn. Are there differences between what the team members believe about curriculum and their beliefs about learning? What implications might this have for instruction? assessment?

Activity Two—Mapping Standards to Curriculum

This activity is an adaptation of Heidi Hayes Jacobs' curriculum mapping process in *Mapping the Big Picture: Integrating Curriculum and Assessment K-12* (pp. 7-24), 1997, Alexandria, VA: Association for Supervision and Curriculum Development. Copyright 1997 by ASCD. Adapted with permission.

Purpose:

In phase one, *Examining Current Practice*, team members reviewed classroom practices and the connections of these practices to local and state standards. Activity Two is an indepth look at how classroom learning activities move students to achieve standards and/or benchmarks. It is important that teams select an initial area of focus, such as computation standards, comprehension standards, or scientific investigation standards.

Team members connect specific learning experiences to standards and/or benchmarks in a particular instructional unit for one month or quarter of an academic year. Creating and analyzing the curriculum maps allows teams to identify areas of strength and areas of concern and to discuss possible changes for the curriculum.

Procedure:

- Team members identify units or topics taught throughout the year and choose one unit for mapping.
- Participants analyze the unit to delineate specific learning activities and assessments.
- Team members examine the maps to make explicit those activities and assessments that support student achievement of standards and benchmarks.
- Teams then determine for a specific standard or benchmark where the matches and gaps are in the maps.
- Once matches and gaps have been determined for the standard/benchmark, the team discusses modifications of the curriculum that should be made if students are going to meet expectations, and what changes will have to occur to effect these changes.

Activity Three—Learning About Students From Demographic and Assessment Data

This activity is based on a suggestion by the Spokane (Washington) Public School Team, Spokane, Washington, who participated in NWREL's Summer Design Institute in July 1997.

Purpose:

Student assessment data and demographic information can offer insights about which instructional practices improve student learning. Team members should have specific information about their students' performances on assessments used to determine student achievement of standards. Demographic information also provides a lens for examining student performance. Useful data may include: information on student populations, mobility, poverty levels in the community, and so forth. Teams interpret student assessment and demographic data in light of their beliefs about learning and the types of learning activities in which students are engaged regularly in the classroom.

Procedure:

- Teams identify patterns of student performance in the subject. For example, have most students done well on computation but not very well on open-ended mathematics problems, or do many students get the details of a reading passage but fail to get the whole picture?
- Teams analyze the information derived from the data and connect this to classroom practice. What happens or does not happen that might explain the data?
- Teams discuss the process skills and content most in need of attention and consider steps to be taken that might influence student learning in these areas.

Activity Four—Learning Activities and Evidence of Student Learning

The protocol for this activity is an adaptation of the student work sample analysis process described by Ruth Mitchell in *Front-End Alignment: Using Standards to Steer Educational Change* (pp. 26-38), 1996, Washington, DC: The Education Trust. Copyright 1996 by The Education Trust. Adapted with permission.

Purpose:

One way for teachers to determine the kinds of changes that might be required to help students reach high standards is to take a critical look at the work that students do for class assignments and projects. As they review student work, they should ask: Is the quality of this work such that it would meet standards? If this is not standards-quality work, what do we need to do? An interesting conversation occurs as teachers and administrators recognize differing assumptions about learning and how best to assure that meaningful learning takes place in classrooms. This can provide the impetus for changes in learning and teaching (Mitchell, 1996).

Procedure:

- Each team member provides a sample of student work and the assignment as outlined by the teacher.
- Teams review the assignment and the student work completed to fulfill the assignment. Things that might be considered: standards addressed, level of thinking required, quality of the student response, and so forth.
- The team records what they learn from this process, e.g., using this work as the resource, what might we know about student learning, what do students know how to do, etc.
- Based on the information from the examination of student work, the team discusses recommendations for steps that might be taken at the school level and the classroom level to assist students to demonstrate quality learning.

Activity Five—Visualizing the Learning Context

Part I: Individual Visioning

Purpose:

Teachers generally do not come to the profession seeking fame and fortune. One chooses to teach for many reasons: to make a difference for children, to ignite the spark of learning, to share the excitement of mathematics or art or language. Whatever the reason, new teachers carry in heart and mind an image of the kind of teacher they want to be and the learning world they want to offer their students.

Procedure:

- Individuals consider what they have learned about their current classroom practice, the beliefs about learning and curriculum they have identified, and the learning demonstrated by their students.
- Team members reflect on their sense of what schooling can mean for students, teachers, parents, and the community.
- Speaking from their deepest heart (in a brief written narrative) participants create the learning context that they believe would lead to meaningful and joyful learning and teaching.

Part II: Developing a Shared Vision

Purpose:

Sometimes a teacher's vision for learning and teaching collides with other ideas about what schools are supposed to do for children. In the past, when this occurred teachers could smile or sigh and then shut the door and follow their own paths. If teachers are to help students meet high standards, and if students are going to know the joys of learning that last a lifetime, then it is crucial that teachers create a shared vision to which they will commit their time, energy, expertise, and passion for learning and teaching (McCombs & Whisler, 1997). This portion of the activity helps team members to elicit areas of common thinking around which they can begin to articulate a dynamic vision for their school. The vision then forms the foundation for setting goals and developing an action plan.

Procedure:

- Team members share their visions for what their school can and should do for all members of the learning community.
- The team looks for points of commonality and records these important ideas.
- Ideas that are truly important for some members should not be debated or dismissed, but rather should be included in a list for further consideration.
- The team recorder writes a statement of the team's vision, and each member receives a copy.

Activity Six—Setting Goals and Creating a Plan

Purpose:

The vision represents the team's hopes for the future of their school, their students, and their own professional lives. It is possible to derive goals from this vision of the learning context and to develop a plan to realize this vision. It is also a time to recognize that no matter how passionate the initial commitment may be, there will be frustrations and obstacles both within ourselves and from others in our professional community and the community at large. It is important to recognize these barriers up front and to plan ways around, over, and through them if goals for learning are to be realized (McCombs & Whisler, 1997). During this activity, team

members will create an action plan from goals based on their vision of the learning context. The plan should incorporate aspects of the current school environment that support the vision and elements that may hinder the realization of the team vision. The plan should identify ways to head off possible problems and ideas to ensure the success of the team's ideas.

Procedure:

- Using the shared vision for the learning context, teams identify two or three goals that will help move the school closer to the team vision for learning.
- Team members develop an action plan to achieve these goals that includes definite tasks for the team and individuals, possible problems that may be encountered, tentative solutions to deal with the problems, and people (teachers, parents, students, community members) and policies that will support the team's plan.
- Cross-team sharing of the plans provides opportunities to explain the plan with clarity and also offers the benefit of feedback from critical friends outside the school environment.

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Appendix

Participant Handouts

Activity #1

Connecting Ideas About Curriculum to Beliefs about Learning and Teaching

Some educators define curriculum as a prediction about how people learn, what they should learn, and the contexts that will support their learning. Others think of curriculum as a written document that tells teachers the knowledge and skills students should learn and the sequence in which the students should learn them. Ideas about curriculum reflect our values, knowledge, and experience.

Materials: paper, pen/pencil, team belief statement (learning and teaching)

Strategy: brainstorming and concept mapping

Outcomes:

- List of curriculum characteristics
- Definition of curriculum based on identified characteristics
- Links between curriculum ideas and beliefs about learning and teaching

Procedure:

- Team members respond to the following: When you think about curriculum what immediately comes to mind? Jot down at least 10 ideas (scope and sequence, textbooks, etc.) that come to mind when thinking about curriculum.
- A concept map is developed as teams share their ideas about curriculum with the whole group. Using the terms recorded on the concept map, the group determines connections among ideas.
- Statements of belief about curriculum based on the concept mapping discussion are recorded on chart paper.
- Teams compare the statements made about curriculum to the statement about beliefs about learning and teaching. Are there connections between beliefs about learning and beliefs about curriculum? Are there differences? What implications might this have for instruction? Assessment?

Activity #2

Mapping Standards to Curriculum

This activity is an adaptation of Heidi Hayes Jacobs' curriculum mapping process in *Mapping the Big Picture: Integrating Curriculum and Assessment K-12* (pp. 7-24), 1997, Alexandria, VA: Association for Supervision and Curriculum Development. Copyright 1997 by ASCD. Adapted with permission.

As teams examined current practice, they reviewed some classroom practices and the connections to local or state standards. This activity is an indepth look at how classroom learning activities move students to achieve standards and/or benchmarks. It is important that teams select an initial area of focus, for example, computation standards, comprehension standards, scientific investigation standards, and so forth.

Materials: teacher reflection, local/state standards, Post-It chart pack, markers

Strategy: demonstration and curriculum mapping

Outcomes:

- A visual account (curriculum map) of classroom units as they reflect standards or benchmarks
- List of standards or benchmarks that are substantially represented in the current curriculum
- List of standards or benchmarks that receive little attention in the current curriculum
- Evaluation of the level of performance expected across grade levels

Procedure:

Part I: Facilitator Demonstration

Curriculum mapping is a valuable tool, and it is important that participants clearly understand the process. The handout contains a written example using a reading content standard in the context of a science unit (forestry) that can be used as a reference. However, the facilitator will walk participants through the curriculum mapping process using an instructional unit supplied by one of the teams. The modeling of each step of the mapping process relates the process to familiar material, provides opportunities for clarification, and can be used as an additional reference as team members map their units to standards.

Part II: Individual

For the first part of this activity team members will work on their own.

- Write the standard or benchmark on the top of the Post-it board and underline it.
- Identify units or topics you teach during the school year. It may be useful to use quarters or months to organize these units or topics. We will use only **one unit** during this

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activity. For example, in the first quarter eighth-graders might participate in a forestry unit (other units and activities will also be included during that time). When teams return to the building, it is important that the mapping be done for this standard (and others) across units/topics for the year to determine the frequency of opportunity students have to achieve the standard.

Standard or Benchmark

Reads different materials for a variety of purposes.

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Forestry Unit			

- List the learning activities students will engage in. Examples for the forestry unit:

  -Students use a dichotomous key to identify local plants and trees.

  -Students evaluate the environmental and economic consequences of proposed state legislation that would increase the forest barrier in the state riparian areas. Resources: legislation, position papers by environmental groups and the timber industry, interviews.

  -Students conduct stream and pond investigations to identify possible effects of forest activity on riparian areas.

  -Student teams develop position papers concerning the riparian legislation.

  -Students develop a survey to gather information about community attitudes toward the impending legislation.

- List the student products or performances that will result from participation in the unit (assessments). Examples for the forestry unit:

  -Completed plant/tree identification

  -Report on effects of proposed riparian legislation (Scoring Guide)

  -Team position paper (Scoring Guide)

  -Survey document (Scoring Guide)

  -Survey report (Scoring Guide)

  -Stream/pond investigation report (Scoring Guide)

Part III: Team Review of Curriculum Maps

- Post all the individual maps. Team members take time to study each map, using small sticky notes to identify activities and assessments that help students meet the standard/benchmark.
- Team members should be alert for repetition of content and skills that does not reflect more sophisticated levels of thinking or performance (Jacobs, 1997.) For example, perhaps identification and life cycles of forests are taught in grades one, three, six , and nine, but the products and performances required of students remain at the same level—listing characteristics, writing a report, and so forth.

Part IV: Matches and Gaps

- List standards or benchmarks that receive substantial coverage in the current curriculum (as practiced).
- List standards or benchmarks that receive little attention in the current curriculum (as practiced).
- List content and skills that are repeated across grade levels. Are these taught at the same level of thinking? Are products and performances at higher grade levels similar to those at earlier levels?
- Discuss any adjustments that may have to be made in the curriculum if students are going to be able to meet high levels of expectation.
- Discuss what would have to happen for these modifications to be made.
- Record your findings to use as a resource for creating a vision and developing an action plan.

Note: This process needs to be completed for each standard or benchmark in the subject area to get a comprehensive picture of the congruence between the classroom curriculum and local and state standards or benchmarks.

Activity #3

Learning About Students from Demographic and Assessment Data

This activity is based on a suggestion by the Spokane (Washington) Public School Team, who participated in NWREL's Summer Design Institute in July 1997.

Student assessment data and demographic information can offer insights about which instructional practices improve student learning. Team members should have information about their students' performances on formal and informal assessments used to determine student achievement of standards. Other information that may help to identify trends includes: data on student populations, data on the community (economic, social, etc.), school and community resources, and so forth.

Materials: formal student assessment data (e.g., statewide assessment, Iowa, CTBS, etc.) and informal data (e. g., IRI, teacher-made assessments), demographic information (e.g., minority populations, mobility rate, discipline records, number of free-reduced lunches, etc.), and state standards

Strategy: observation, detecting patterns, and using curriculum maps to identify implications for practice

Outcomes:

- Identification of achievement trends
- Insight into the factors that influence students' performance and their ability to meet standards or benchmarks
- Recognition that beliefs influence the classroom program offered to students
- Record of possible next steps to use when developing an action plan

Procedure:

- Review student data and identify response patterns. What patterns do you notice in the assessment information? For example, have most students done well with math computation but have difficulty explaining how they arrived at their answers?
- Use curriculum map to connect performance data with classroom activities. What happens in the classroom (or does not happen) that might explain the data? For example, students spend lots of time practicing and honing computation skills but very little time communicating how they solve problems or why they chose a particular algorithm to solve the problem.
- Use Team and Individual Teaching Portraits to connect this information with beliefs about knowledge, learning processes, and the types of assessment used to measure student progress. What beliefs about knowledge, learning and assessment might account for the data? For example, the teacher believes strongly that basic math must be mastered before moving on to exploring rationales for solving problems.
- Discuss possible steps that might be taken to influence student performance.
- Record these for future planning.

Activity # 4

Learning Activities and Evidence of Student Learning

The protocol for this activity is an adaptation of the student work sample analysis process described by Ruth Mitchell in *Front-End Alignment: Using Standards to Steer Educational Change* (pp. 26-38), 1996, Washington, DC: The Education Trust. Copyright 1996 by The Education Trust. Adapted with permission.

Materials: each team member will need a copy of a typical classroom assignment or learning activity, about five examples of student work completed in response to the assignment, and copies of the standards for the content area

Strategy: using a protocol to analyze student work samples

Outcomes:

- Insight into strategies that students use to complete the specified assignment
- Insight into the level and type of expectations teachers have for students
- Record of possible actions that might be needed at classroom and school levels if students are going to meet standards or benchmarks

Procedure:

Team members review the assignment and the student work completed to fulfill the assignment. The following questions may help guide your review:

- Learning Activities:

  -What standards are reflected in the learning activity? (content/process)

  -What type of thinking was required of students? (e.g., recall, compare/contrast, cause/effect, categorizing, evaluation)

  -How do students know the quality of learning expected of them?

  -How are criteria for learning evidence developed?

  -Does the activity move students to increasing responsibility for learning and assessment?

  -How does this learning activity connect to future work that students will do? In your class? In other classes?

- Student Work:

  -Does this work meet the standard for content (e.g., shows clear, in-depth understanding of concepts)?

  -Does this work meet the standard for process (e. g., effectively uses a variety of reading strategies to create meaning from text)?

  -Does this work meet the standard for quality (e.g., free of spelling errors, makes connections among complex ideas)? If not, what might be done to change this?

- Team members discuss what they understand about student learning through this analysis of work samples. In an assignment that asked for a personal response to a story, for example, perhaps only a few students made clear connections between the text and their own experiences.
- Team members then discuss (based on examination of all student work from the group) what implications this information has at the classroom level and the school level. For example, if students focus on only one aspect of a math problem (key words) and this leads to errors in thinking and solving the problem, what might teachers do in the classroom? What might be done at the school level to facilitate student understanding of problem solving?
- Record the ideas.

Activity #5

Visualizing the Learning Context

Teachers have examined classroom practice both individually and collectively. They have identified connections among practice, values, student outcomes, and the standards-based curriculum. Now it is time to do a little possibility thinking.

Materials: records from previous activities (mapping, data analysis, student work samples, belief statements, etc.)

Strategy: free writing, cooperative project

Outcomes:

- Written personal vision of the optimal educational context
- List of ideas that represent the shared vision of the team
- List of controversial ideas to be considered at a later date

Procedure:

Part I: Individual Visioning

Up until this point we have focused on standards and what that means for teaching practice and student achievement. We have always had standards and assessments, but the levels of expectation for students have changed. How can we help students meet expectations and still have a classroom and school that is exciting and uplifting for the entire learning community? This is your opportunity to create the future of your school. *Why would teachers, students, or anyone else want to come to this place called school every day?* You might consider how teachers and students would spend their time, the physical space, the kinds of media and materials there would be, the kinds of knowledge and skills emphasized, and so forth. **Please write your response.**

Part II: Developing a Shared Vision

- Each team member shares his or her vision of the school future.
- After this sharing, the team leader leads the discussion to identify points of commonality. The idea at this point is to determine where the team can agree, and then use this as a basis for setting initial goals. These points are the foundation of the team vision.

  -The "team vision" is recorded.

Note: Ideas that are crucial to some members but do not have general support should be included in a separate list for future discussion.

Activity #6

Setting Goals and Creating a Plan

The vision represents the team's hopes for the future of their school, their students, and their own professional lives. It is possible to derive goals from this vision of the learning context and to develop a plan to realize this vision. It is also a time to recognize that no matter how passionate the initial commitment may be, there will be frustrations and obstacles both within ourselves and from others in our professional community and the community at large. It is important to recognize these barriers up front and to plan ways around, over, and through them if goals for learning are to be realized (McCombs & Whisler, 1997).

Material: team vision and records from previous activities

Strategy: goal setting, planning, and cross-team sharing

Outcomes:

- A set of goals to realize team vision for learning and teaching
- A written plan to achieve the team goals
- Feedback on the action plan from other teams

Procedure:

- Review your team vision to identify two or three goals for your team that will bring the school closer to the team vision for learning.
- Record the two or three goals for your team.
- Develop and write a plan to achieve the team goals.
- Consider what in the current environment supports your team vision for learning in your school. Consider any barriers to achieving the vision. For example, frustrations may diminish team fervor for the plan, school or district policies may be a hindrance. How will you enlist the support of others? How will you deal with obstacles? How will you support one another in this process?
- Provide feedback to, and receive feedback from other teams about the action plans.